CATS
CAPITAL AREA TIMEX/SINCLAIR USERS GROUP

NEWSLETTER
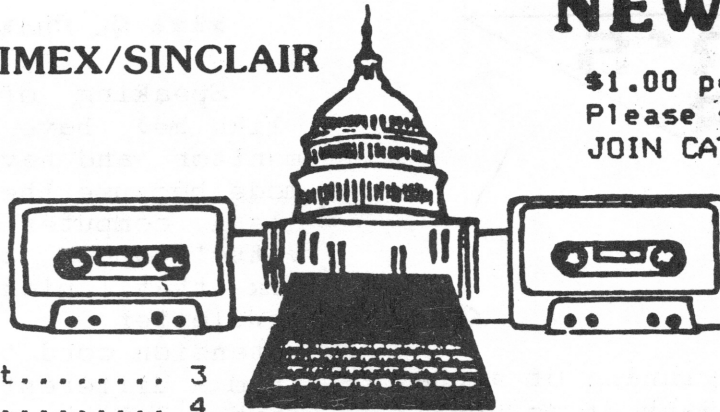
Volume 5, Number 3

June, 1987

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Contributers

Tom Bent	John Riley
George Rey	Vernon Smith
Mark Fisher	Akin Olowofoyeku
Duane Parker	Peter Fischer
Hank Dickson	

LOOKING TO THE FUTURE

July 26 - Maryland Hamfest and Computerfest at the Howard County Fairgrounds

September 13 - Gaithersburg Hamfest at the Montgomery County Fairgrounds.

PRESIDENTIAL RAMBLINGS

The summer doldrums are taking a back seat to computer activities. I received 4 phone calls in one day from people asking for computer information. They all wanted to know about 1000 products, hardware, software and interfacing! That sets a new record for 1000 info from me.

One call was from a PC8300 owner. The PC8300 is a TS1000 PC compatible with enhancements. I do say this in jest, because the 8300 is as compatible to the 1000 as the IBM clones are to the IBM PC. They don't run any of the really good stuff without major software rewrites. Anyway, he informed me that the 8300 with a 1000 ROM acts like a 1000 and runs everything! He had a 1000 ROM upgrade and wanted to install it in his 8300. I gave him the scoop on how to do it. Anyone wanting more info on this PC8300 should contact American Design Components at 800 524-0809.

New QL products are effervescing lately. There appears to be absolutely no slow down in product announcements. There is a new Desktop Publishing program, an enhancement for Quill, the wordprocessor, a multitasking spelling checker, updates for QfLash, Ice, toolkit II, and some of the Quanta Libraries also. Come to the meeting for more information on these updates.

I have all of the parts for the QL mother boards except the ZX8301 chip. It is still "on the way." I have a dozen prototype battery clock boards and a half a dozen Eprom boards. Let me know if you want one. I expect production boards in July.

LET'S VOTE!!

It is now time to elect officers to serve for the upcoming year. Please come to the meeting and vote!!

Tom

EDITOR'S CORNER

June is the beginning of a busy summer season for many of us, but I hope that many of you will find time for CATS! Come to the meetings, support the newsletter with your readership and contributions, and share your resources with others! I am glad to have received articles this month from George Rey and Duane Parker, and look forward to many more.

**** The -als Have It ****

One of the controveries that has raged in the inner circles of CATS for several years is how to spell our name! Are we the Capit<u>al</u> Area Timex-Sinclair Users Group or the Capit<u>ol</u> Area Timex-Sinclair Users Group? Last month the Executive Committee examined this burning issue backwards, forwards, and upside down, and came forth with a decree -- we are henceforth officially to be known as the Capit<u>al</u> Area Timex-Sinclair Users Group! All newsletter mastheads and other printed material will be changed if necessary to conform to our official name. Now, don't you all feel better? The only problem is, now we need a new burning issue!

**** Writers Still Sought ****

We are still looking for someone who will write a regular monthly column in support of the 1000/1500 and the 2068 computers. Does it rankle you that there is "too much" on the QL and "not enough" on the other machines? Then maybe YOU are the one to write one of these columns! If you don't write it and submit it, we can't print it!

**** QL Shakes Solved ****

Speaking of the QL, if you (like me) have been using a 60 hz monitor and have been stuck in TV mode because the monitor mode image has a computer's version of St. Vitus' dance, then try this quick fix that I picked up from the SMUG newsletter. Simply use an extension cord to plug your monitor into a different electrical outlet. This outlet needs to be on a different branch circuit from the one that your computer is on. This strategy has eliminated about 95% of the image-shaking problem on my system. Try it, maybe it will work for you! Its a lot cheaper than buying another monitor, and as you know there are many programs that <u>must</u> run in monitor mode.
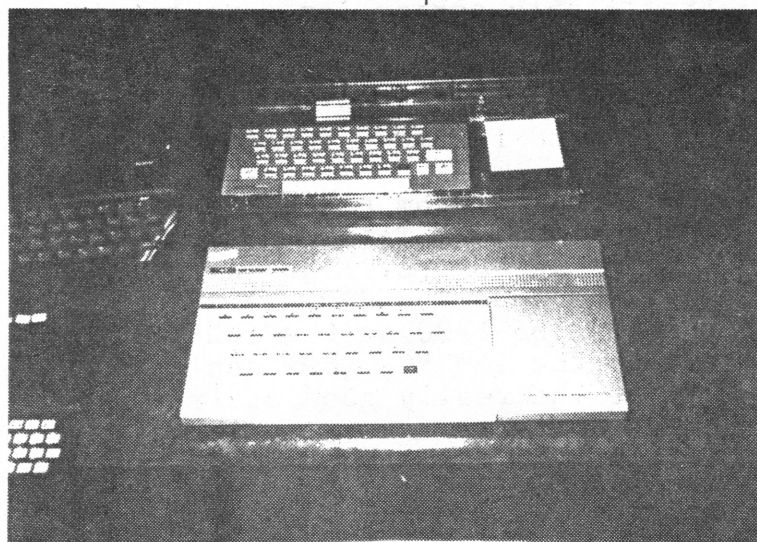
**** New Mailing Address ****

One last thing: take note of our new mailing address! We now have a ritzy Fairfax Station post box, because no one lives near enough to the old one. The new address is Capital Area Timex Sinclair Users Group, P.O. Box 467, Fairfax Station, VA 22039.

John

At the top, the lucite-encased prototype of the 2068 that was produced by Sinclair Research, Ltd.

Reflections in a Hollidome...or, Back Home Again in sIN-clair-DIANA

The first weekend in May saw the return of the Midwest Timex/Sinclair Computerfest, reset from Cincinnati to Indianapolis.

Attendance approximated 500, slightly greater than last year.

Those who showed up were inclined to be acquisitive, and trading was brisk for the duration. About seven vendors were offering their regular deals on the Quantum Leap (QL) computers. Response was lukewarm until CAROL and GEORGE WHITHAM of A+ Computer Response boldly cut their price from $179 to $99. Activity picked up instantly, and a total of about 100 QL's moved out before the Computerfest was over.

The sidebar flea market was small and had mixed offerings. Z-80 boards only--minus their ROM's--were going for $10. Non-working TS/1000's were $15.

CATS attendees included BILL BARNHART, TOM BENT, AUDREY and BOB CURNUTT, RUTH FEGLEY, DAVID ROTHMAN and Mr. & Mrs. REN STELLOH. Thanks mainly to the efforts of BILL, AUDREY, BOB and RUTH, the CATS display was a financial success. Old newsletters, new subscriptions and JOHN RILEY's 2068 tape library were the items in demand.

The Holiday Inn Northwest, site of the Computerfest, was a Sybarite's delight. The gigantic indoor "Hollidome" offered every diversion: swimming pool, soda fountain, sauna, pool tables, miniature golf course, cabaret, jacusi, large-screen TV, ping pong tables, and glass encased elevators. The main floor ballroom was pre-empted by the Marion H.S. senior prom-athon, replete with both stretch limousines and horse-drawn carriages. The Computerfest was upstairs in its own fairly spacious quarters.

The main drawback was that the one elevator to these quarters was not running. The organizers blamed the hotel and the hotel blamed the state for not inspecting the elevator in time. In any case, participants ended up daily hefting mega-credenzas filled with electronic equipment up and down two tiers of slippery, carpeted steps. No excuse for this.

Two vendors were displaying the Amstrad PC1512, a slick IBM PC XT clone produced by the new daddy for Sinclair. It has taken Europe by storm.

There were many small vendors in view offering their proprietary software, mostly for the 2068 but some also for the QL. One of these was JON ROKETENETZ of Cincinnati, founder of PEECH II productions. Last year he was promoting his DRAW II color graphics program for the 2068. This year he surfaced with his clever ElectriQL desk organizer for the QL.

In any case, as Thomas Wolfe once said, you can't go home again to Cincinnatti, especially when it is Indianapolis. This year, Indianapolis probably treated the vendors better; but it was Cincinnati that truly made the Sinclair users feel they were home again in you-know-where.

                    *   *   *

Final observation: these Sinclair happenings have begun to take on the type of patina usually associated with a Star Trek convention or a Corvair rally (having attended many of both). Let us all hope it is more an indication of middle age than the prelude to an impending demise.
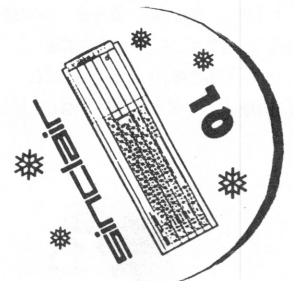
QL PRINT-OUTS

I purchased a **Seikosha** SP-1000AS (serial) printer for my QL as John Riley said it was identical to the QL printer. I also have the 2.3 version of *QUILL*. I got the printer to work easily--**but found it did not print out in BOLD,** *UNDERLINE,* HIGHSCRIP, or LOWSCRIP, type modes, and only in **PICA** typeface. Using guides from the printer manual and pages 3 - 7 of the QL Information Chapter I have changed the printer driver parameters to match version 2.3 and my personal preference which uses other features of the printer.

The **TABLE** below has the DEFAULT, *2.3 Version,* and **MY** preferred driver parameters.

QL PRINTER DRIVERS

Parameter	Default	2.3 Vers.	My Pref.
Name	Default	SP-1000	SP-1000M
Port	ser1	ser1	ser1
Baud Rate	9600	9600	9600
Parity	None	None	None
Lines	66	66	66
Charact.	80	96	96
Cont Form	Yes	No	No
Line Code	CR,LF	CR,LF	CR,LF
Pre Code	None	ESC,M	ESC,M
Pst Code	None	None	None
Bold On	None	ESC,E	ESC,E
Bold Off	None	ESC,F	ESC,F
Under-On	None	ESC,-,1	ESC,4
Under-Off	None	ESC,-,0	ESC,5
Sub-On	None	ESC,S,1	ESC,S,1
Sub-Off	None	ESC,T	ESC,T
Super-On	None	ESC,S,0	SO
Super-Off	None	ESC,T	DC4
Tran 1-10	None	None	None

This memo has been printed in my prefered style, where I substitute **Elite** print for Pica, *ITALIC* print for Underline, *DOUBLE WIDTH* for HighScrip.

GEORGE REY
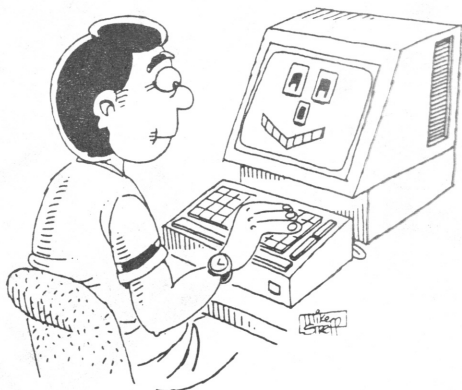
QL on the QL
By Vernon Smith

The other day I saw a bumper sticker which said, "Watch my rear end, not hers". For some reason, I started thinking about the front end utilities that we use. Just so the real computer gurus don't jump all over me, I'm talking about those programs, usually loaded first, which can be used to quickly load others.

One of the oldest, and one most of you are familiar with, is ICE. Rather than software, it is an EPROM which plugs into the rear ROM cartridge slot. Its advantages are that you no longer have to type out program loading instructions, just move the pointer to the icon and click, and that it uses almost no memory. The latter feature is a real plus for those who have not increased the memory size of their machines. To their credit, Eidersoft, the maker of ICE, has tried to extend the applicability of ICE by bringing out ICICLE for working with word processing programs and artICE, a graphics program. They also have fitted a mouse on the ICE module which speeds things up quite a bit. Some disadvantages are that it cannot be run from the TV (F 2) mode, since it cuts off the main menu bar, and some of the functions needed more thought. Why have a 4 function calculator and why must the cursor/ mouse be used to select the numbers, rather than a keyboard? Since there is only one icon each for MDV, FLP, and RAM you must change the icon if it isn't set correctly. I found this bothersome.

Another oldie, is Giga-DESK. Where ICE is on an EPROM, it is software driven and comes with a mouse, which is really needed since cursor movement without one is incredibly slow. I liked DESK better than ICE because it had a much better directory capability and, most of all, it had windows

that I could size and place anywhere on the screen. Many people didn't like DESK because the 5v. to power the mouse came from a plug in the ROM slot and they wanted to keep it open. For what I have no idea. A little bit of ingenuity would have overcome this; I powered mine from the RGB plug. I felt DESK's real disadvantage was it had only three icons to designate peripherals: drives 1, 2, and the third which was user specified. If you had a disk I/F installed, you needed to specify mdv or ram EACH time you wanted to access that device. Before we move along, let me say that if you have a chance to acquire Giga-DESK with a mouse, do so, since the mouse can be used with some other programs as well.

Now that the history lesson is over, what's new and hot on the market today? After nearly a year without any significant offerings, there are five programs to choose from, QIMP, Taskmaster, QRAM, QKick, and QATS. This month we'll look at QIMP and Taskmaster. I've just received QRAM and need to learn how to use it, so we will leave it and QKick for later. I tried to buy a copy of QATS directly from the distributor, Cope, but the they informed me that they only took pound sterling checks, no plastic. But who needs QATS, with the first four programs available to us?

QIMP, stands for QL Icon Manager Program. It has all of the functions of DESK and more. First, there are icons for 2 mdvs, 2 flps, a ramdisk, and a printer. Most importantly, the program has an on-screen editor. No more switching to Super-Basic and back again! Finally, the graphics are much more imaginative and colorful than the first two programs. Remember the mouse with DESK? Well, you can use it with QIMP by plugging it in the CTL2 port. By using this port, programs which use a joystick in CTL1, can still be

used without disconnecting any plugs.

If there was a prize for "The Most Domineering Program", Task Master would win hands down. You don't call in this program, everything must run inside it. After you see what it will do, though, you really don't care. First and foremost, it truly multi-tasks. If you have a slow printer like I do, this is a real boon. If you configure it right, you will be able to run 8 (yes, that's E-I-G-H-T) executable programs simultaneously and have a ninth slot open for Basic. WOW, try that on your IBM PC! Another function is Command Control. When accessed, either from the entry screen or within the program, it will record and save your key strokes. I run my printer drivers and help files from RAM, so I have a command file which loads all of them with just two key strokes. It has the widest range of file handling functions available, a notepad, and a calculator which will enter the answer at the cursor position of the program you are using. This ought to be handy when using Quill and you need to add a column of numbers. If you only get one program this year, Taskmaster should be the one. Remember, when using Taskmaster, you must disconnect ICE as the two are incompatible.

That's about it for this issue. Next month I'll try to cover QRAM and QKick and anything else that comes to mind. Tell me what you want to hear about and I'll try to write it up. Lastly, if you have a better title for this column (clever but not obscene) let me know; my daughter said "QL on the QT" was a "dumb" title but she couldn't suggest an alternative. CAN YOU?

Putterin' in the QL:

A One Chip Mod that Cuts Power Consumption, Plus a Bonus!

By Mark Fisher: research by Tom Bent

Background....

Ever notice that little cooker of a spot right behind the Microdrives? That's the waste heat from the power regulator's heat sink. I've seen it get hot enough that I was nervous for the microdrive cartridges that I sometimes leave there - or for the microdrives themselves, formed of thermoplastic.

That heat bothered Tom Bent too, and he went on a little expedition into the machine to find out why the regulator was working so hard. If you look at the motherboard, you'll see plenty of chips, nestled close together. You might think that the sheer number of chips was using the power, but Tom found that just two chips were hogging 30% of the power!

These were the two chips that house the operating system ROM. Normally, such chips are electrically activated (selected) before the computer attempts to read their contents, and remain quiescent when the computer is off somewhere else in its 640 kilobytes of memory. Not here! Sinclair Research, perhaps in an attempt to speed up access time to the ROM, left the chips that hold the ROM "burning" at all times. If you open the case and leave the machine on for a while, you'll see the result; those two chips are hot as pistols.

Solution.....

The ROM is held on 32K and 16K ROM chips; a 64K EPROM has recently become available. With the help of one small 74HC00 chip, it is possible to combine the contents of the two ROM chips into one EPROM, and have 16K available for other things, such as....

The Bonus! ('s)

Tony Tebbe's Toolkit II! If you've purchased Toolkit II, a copy of it can be burned into the EPROM along with the DOS. At times you will want to be able to "remove" Toolkit II from the machine. This is easily done, by adding a DPST switch to the 74HC00 (the switch is led to the outside of the case, of course). The entire 'mod' is easily packed into the center of a 28 pin socket, that is sandwiched in between the EPROM and the motherboard.

This 'mod' occupys only one of the two sockets. The other is available for something else - a switch selected English ROM perhaps, or a 32K static RAM!

Cost:

The EPROM, a 27C512-25, is $17.00. The 74HC00 is perhaps $1.00, while the socket and switch will cost

another $1.50. Wire wrap wire is tiny, easily soldered, and pretty. Tom used two sockets between the EPROM and the motherboard, but I couldn't find thin enough sockets. Since there are only three solder points to the top socket, it's easy enough to just tack-solder the leads directly to the appropriate pins of the EPROM. If I decide to re-program the chip later, I'll just remove those three wires, and pop it out of the socket.

Doing it:

Prepare the 74LS00 by tying pins 1 and 2 together. Similarly, tie pins 3, 4, and 5 together, as well as 6 and 9. Clip or bend in the rest of the pins, leaving the heavier shoulders. (See the illustration) Make up the DPST switch by adding a 6" lead to each of the three terminals of the switch. Connect the center lead to pin 10, and the outside leads to pins 11 and 14.

Connect the HC00 to the bottom socket: Be sure to keep your leads short - it'll be easier if you have a socket that has a 1 mm. exposed land at the base of each pin. Tie the combined pins 1 & 2 to pin 22 of the bottom socket (22B), pin 7 to pin 14B, pin 12 to 20B, pin 13 to 27B, and pin 14 (again) to 5v supply, pin 28B.

Three more wires: From pins 3, 4, & 5 to pin 22T, pin 8 to 20T, and pin 12 (again) to 1T. If you're using a single socket in the sandwich, lead the wires up under the EPROM, then gently bend pins 1, 20, and 22 out slightly, to clear the socket. Tack solder the three leads to the exposed pins, and press the EPROM into the socket.

Install it: Open the case, pull the two ROM chips, and push the assembly into one of the exposed sockets. (It doesn't matter which - they're wired in parallel.) There's room for the switch beside the cart. port, behind the expansion port. Don't forget to re-assemble the case!
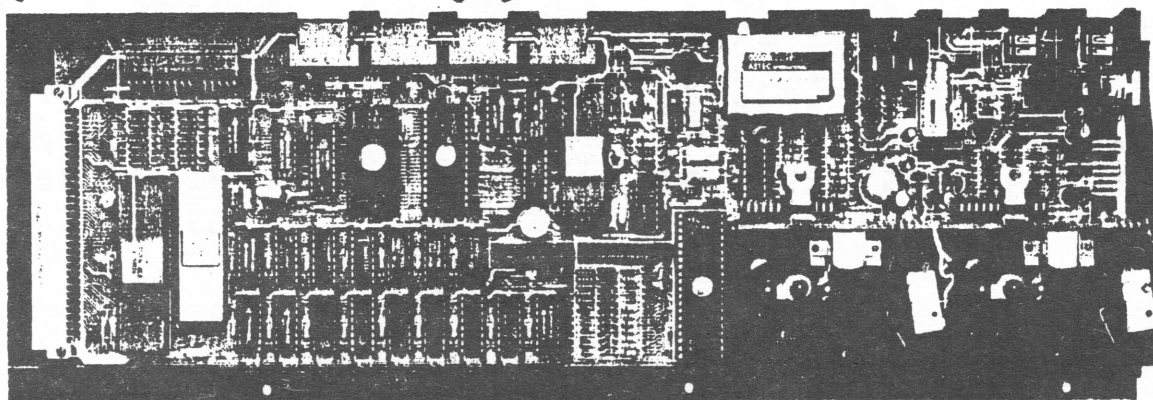
Testing it:

Power up. You should see the TV/Monitor select screen, with the Toolkit logo above. If not, you probably bumped two of those tightly packed solder joints together. Re-inspect.

Prepare the 74 HC00 (Bottom View)

Connect the HC00 to the Bottom Socket

All views from t
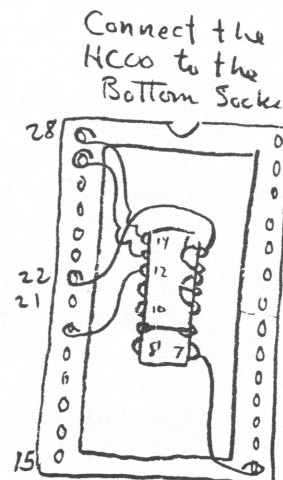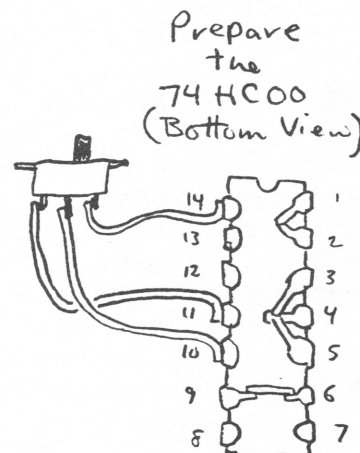
Position of DPST switch.

The power-hungry ROM's

Compuserve as Expert System

How many times have you run into a hardware or software problem and thought that you had nowhere to turn? Perhaps your usual Sinclair resource person is out of town or unavailable for some other reason, or (maybe) you are like me -- I find myself reluctant to call the same person too often with my computer woes.

Don't despair, and don't be flummoxed! Discover, as I have, the use of the Compuserve Sinclair Forum (go club) as a readily available expert system. Every Wednesday night from 10 to 11 p.m. a goodly crowd of T/S enthusiasts

Connect the
HC00 to the
Top Socket (or chip)

hold forth, and their favorite question to hear is, "I have a problem with ......, can anybody help me?" Instantly, your screen will light up with people responding "I can!" and "I will!" On a typical night there are persons online with virtually every hardware configuration and a vast collective amount of software experience.

By way of example, I have received help on many occaisions from these benevolent wizards. When recently I wanted to explore RLE (Run Length Encoded) graphics on the 2068, Bret Lanius sent me a shareware program to get me going. When I bought a used QL with a corrupted Quill cartridge, a nice fellow in North Carolina cloned me a copy of his and sent it to me. Later as I upgraded the QL to disks, Sysop Dave gave me sage advice on how to interface the new hardware without smoking my system.

These are just a few examples of the kind of resources that are available on the T/S forum. So dust off that modem, get online, and join in!

he bottom.
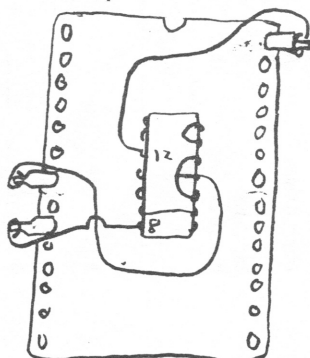
VI-CALC AS EXPENSE ACCOUNT
By Akin Olowofoyeku

:1 :2 :3 :4 :5 :6 :7 :8 :9 :10 :11 :12 :13 :14 :15 :16 :17 :18

Help Page -> $g,ai4
Save,#s :Load,#1 :Print,#q

AKO ENTERPRISES
1613 DAYTON ROAD
ADELPHI, MD 20783

```
          EXPENSE    ACCOUNT
          =====================

NAME: Mary Jane                      WEEK ENDING: 10/18/86

DEPT: M.O.                           DEPT. NUMBER:   M.O.

TRIP PURPOSE: To Trade Show
```

CITY	MON Wash.DC	TUE NYC	WED NYC	THU NYC	FRI Wash.	SAT	SUN	TOTAL
Airfare, shipfare	657.50	0.00	0.00	0.00	0.00	0.00	0.00	657.50
Bus,train,taxi	0.00	0.00	0.00	0.00	6.00	0.00	0.00	6.00
Auto miles	80.00	0.00	0.00	0.00	80.00	0.00	0.00	33.60
Auto gas,oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Auto rental	0.00	0.00	0.00	148.85	0.00	0.00	0.00	148.85
Parking, tolls	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Personal Meals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Breakfast	0.00	4.25	4.50	4.50	4.50	0.00	0.00	17.75
Lunch	0.00	5.75	7.50	4.25	0.00	0.00	0.00	17.50
Dinner	12.35	8.00	12.50	18.45	0.00	0.00	0.00	51.30
Business Meals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Breakfast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lunch	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dinner	0.00	21.45	41.60	0.00	0.00	0.00	0.00	63.05
Entertainment	0.00	0.00	22.75	0.00	0.00	0.00	0.00	22.75
Lodging	67.92	67.92	67.92	67.92	0.00	0.00	0.00	271.68
Telephone	8.82	14.35	4.20	11.27	6.20	0.00	0.00	44.84
Miscellaneous	0.00	0.00	0.00	3.35	0.00	0.00	0.00	3.35
TOTAL	763.39	100.27	118.07	174.09	182.35	0.00	0.00	

```
Mileage Rate   .21                 Total Expens.  1338.17
                                   Advance         750.00
                                   Prepaid Fare    657.50
                                   Previous Bal.     0.00

Signed: _____   Date: _____  Due Company      69.33
                                   Due Employee      0.00

                           69.33
                            0.00
```

HELP PAGE
=========

```
1. Record Expense      $g,n1 >amount
2. Traveler's Name     $g,h2 >'name
3. Date of Travel      $g,h10>'MMDDYY
4. Mileage Rate        $g,an1>amount
5. Total Daily Exp.    $g,ak1
6. Total Exp./Cat.     $g,n9
7. Expense Summary     $g,am10

        $g,n1 to return
```

Location: Instruction

```
a1:  #f,a,l
e4:  "EXPENSE
e6:  "ACCOUNT
f1:  "======
f2:  #r,f1,f2:f12
h2:  "NAME:
h10: "WEEK ENDING:
j2:  "DEPT:
j10: "DEPT. NUMBER:
l1:  "TRIP PURPOSE:
n4:  #f,4,r
n4:  "MON
n5:  #f,5,r
n5:  "TUE
n6:  #f,6,r
n6:  "WED
n7:  #f,7,r
n7:  "THU
n8:  #f,8,r
n8:  "FRI
n9:  #f,9,r
n9:  "SAT
n10: #f,10,r
n10: "SUN
n12: #f,12,r
n12: "TOTAL
q1:  "------
q2:  #r,q1,q2:q12
p1:  "CITY
q1:  
q2:  #r,q1,q2:q12
r1:  "Airfare
r4:  #f,4,$,r
r4:  0
s4:  #r,r4,s4:ai4
t4:  $b
t4:  an4#t4
r5:  0
s5:  #r,r5,s5:ai5
t5:  $b
t5:  an4#t5
r6:  #f,6,$,r
r6:  0
s6:  #r,r6,s6:ai6
t6:  $b
t6:  an4#t6
r7:  #f,7,s7:ai7
r7:  0
s7:  #r,r7,s7:ai7
t7:  $b
t7:  an4#t7
r8:  #f,8,$,r
r8:  0
s8:  #r,r8,s8:ai8
t8:  $b
t8:  an4#t8
```

Location: Instruction

```
t9:  $b
t9:  an4#t9
r10: #f,#10,$,r
r10: 0
s10: #r,r10,s10:ai10
t10: $b
t10: an4#t10
r12: #r4:r10
s12: #r,r12,s12:ai12
t12: $b
t12: #t4:t10#an4
aj1: "------
aj2: #r,aj1,aj2:aj12
ak1: "TOTAL
ak4: r4+s4+(t4#san4)+$u4:ai4
ak5: #r,ak4,ak5:ak10
al1: $t,aj,al
am10: "Total Expens.
am12: $r12:ai12
an1: "Mileage Rate
an4: .21 (or current rate)
an10: "Advance
an12: 0 (or current amount)
ao10: "Prepaid Fare
ao12: r12
ap10: "Previous Bal.
ap12: 0 (or current amount)
aq1: "Signed:
aq5: "Date:
aq10:
ar8: &an12:ap12-am12
as8: am12-&an12:ar12
ar10: "Due Company
ar12: (&an12:ap12&aa12)#ar8
as10: "Due Employee
as12: (&an12:ar12&aa12)#as8
a15: "HELP PAGE
b15:
d14: "1. Record Expense $g,n1>amount
e14: "2. Traveler's Name $g,h2>'name
f14: "3. Date of Travel $g,h10>'mmddyy
g14: "4. Mileage Rate $g,an1>amount
h14: "5. Total Daily Exp. $g,ak1
i14: "6. Total Exp./Cat. $g,n9
j14: "7. Expense Summary $g,am10
#15: "$g,n1 to return
a1:  "Help Page -> $g,ai4
a6:  "AKO ENTERPRISES
b1:  "Save,#s :Load,#1 :Print,#q
b6:  "1613 DAYTON ROAD
c6:  "ADELPHI, MD 20783
r9:  #f,9,$,r
r9:  0
s9:  #r,r9,s9:ai9
t9:  $b
t9:  an4#t9
```

QL Resources & Accessories, Cheep!
By Duane Parker

I found the Resources/Products for the QL in the April CATS N/L excellent, especially for bargain hunters. I think that we can do even better by keeping each other aware of products that are in the inexpensive category, even if they are surplus or used. Maybe we could start a bulletin of bargains on a blackboard at the meetings. I would like to describe a couple of items that are in the cheap category - and some problems.

B/W Monitor. Electronics Plus (College Park, MD) sells a Hitachi 12 in. diag. CD12 B/W monitor in a metal frame for $10. It is new, but requires a 12-14 volt power supply ($10-20 more). It will display the full 85 characters from the QL in adequate resolution, and it does well with the 2068. For the QL one must wire a plug (RGB, 8-pin DIN, pins 2 & 3) to connect the QL to the pc board on the monitor. I finally found the brightness control - it is a small pot. on the board. Problems: There are light retrace lines on the dsiplay - these do not affect my use of the monitor. After using one of these for several months, it suddenly quit. I could not identify the problem; I tried everything I, and my experts, could suggest. Three months later I turned it on again, it worked! I find that I can always get it to work by switching the power on and off until it "catches". At ten bucks, I could afford, and bought, a spare. At CATS meetings you may have seen this monitor - Mark Fisher has used it in his demonstrations.

Printers. Since the 2040 printer does not work with the QL I was without a printer at the start. We did have an electronic typewriter, a Royal alpha 600P (a gift). In contrast to the $100+ interfaces required for others, a parallel interface is available for the alpha 600P for ca. $65. It is on a card that mounts inside. Then I got the "Miracle" printer serial to parallel I/F ($45 then, now $35), and once I got the proper control codes into the printer driver, it works fine to produce letter-quality printing at 13 cps.

Different print wheels are available and the pitch can be adjusted with control codes to values unavailable from the typewriter keyboard, e. g.: 9, 13, 15. I have seen used alpha 600's for < $180. Problem: One night while I was puzzling over a document on "Quill", the typewriter suddenly burned out a board & motor. The switch was on, but it was not printing! Under the warranty, Royal replaced the parts, but it cost $60 for the labor and it sat in the shop for 6 weeks, mostly awaiting parts. It now works like new again as this printing shows.

While the Royal was out I needed a printer for business use, so I scoured ads in papers and magazines. My quest resulted in finding a used, serial, pin-feed dot-matrix printer in a "Computer Shopper" ad. I had not heard of the brand - IDS (Model 480, Microprism). I negotiated a price of $90. This purchase turned out well; it will print at 110 cps draft & 72 cps "NLQ", three pitches, double-wide, etc. I did have to wire a cable with 9-pin to 25-pin plugs to connect it. When I got it home I found that it also has a parallel interface, connected through the 25-pin plug.

In hunting other printers in the $150 range I found listed Diablo S-11 (serial dot-matrix) and a thermal printer from B. G. Micro for $44 (made by Cannon originally for the IBM PC-Jr). Does anyone know how these will would with the QL? Other serial printers? Mail order items in this range often require significant shipping costs.

Second-Hand Stores. In browsing second-hand stores one can often find computers and accessories. At the National Trade Center (E. Gude Dr., Rockville), I have seen TS-1000's priced at $22 and an Okidata 10 printer at $75. They often have office type workstations & monitors, usually up for their auction. One can often negotiate prices at these places.

REVISED REVIEW: SPECTERM-64 Ver.4.0 & 4.1   By Pete Fischer

This program first appeared as a commercial program in England where it is widely used on the Spectrum. Grey & Clifford Computer Products obtained the rights to sell it in the U.S. as modified for the 2068. Version 4.0 ran only in Spectrum mode. There are both Spectrum & 2068 versions of 4.1.

! NOTE: I originally reviewed this software in Ver.1.0 of "The T/S Guide to Tele- !
! communications". Much of that review proved erroneous. Please read this carefully! !

The big news here is Telecommunications at 1200 B.P.S. on the 2068. This is the ONLY way to achieve that speed on this computer. How can I describe 1200 B.P.S.? Well, let me put it this way, if you bought a magazine and could only look at 10 sq. inches at a time and had to read the ENTIRE MAGAZINE in sequence- that's 300 bps. But 1200 is like skipping through till you find the part you want and THEN stopping to read. It's much more satisfying and efficient.

It also puts Long Distance telecommunications in a "whole other dimension". As I mentioned elsewhere, an Xmodem transfer at 1200 BPS takes ONE EIGHTH the time of HEX transfer at 300 BPS; with the additional benefit of error checking. Once you begin serious downloading, you will truely appreciate this!

The second big feature of this software is it's versatility which is m-nifest in a block of 7K designated as a permanent BASIC component. That is, permanent all the time you're online, it dosen't get erased the way the MTERM II buffer does. However, you can easily change it, just by loading a different version. What good is that major block of memory? Well one PRIMARY use is to interface the program to YOUR mass storage, WHATEVER that may be: Microdrive, Disk Drive or Ramdisk (coming soon).

The next major use is to interface a WIDE range of modems which is particularly easy with the use of the Z-SI/O Card, but also possible through other RS-232 inter-faces.

What else? Well there have been a wide variety of utilities written for MTERM over the years, all squeezed into small blocks of memory left over by accident. The 7K block in the Specterm software is a LARGE BLOCK by comparison. In it, you could easily put printer drivers, RLE decoders, auto-save routines or a number of other utilities ALL AT THE SAME TIME!

Those routines used to I/F the mass storage and modems are called "OVERLAYS", and were developed by CP/M programmers to allow easy modification of a program with-out divulging the SOURCE CODE. When you buy Specterm 64, what you're buying is the CODE. But packaged with it, as a convenience, are some examples of these OVERLAYS.

In my first review, I said, quite negatively, that you need to enter a long BASIC statement in order to check the buffer. That was ABSOLUTELY FALSE!You can sim-ply incorporate this statement into the BASIC component, and thus, easily check the buffer, simply by escaping to BASIC. In fact, this routine is provided in the stock tape as it comes from Grey & Clifford. I had simply failed to load that Overlay.

This terminal generates 64 columns WITHOUT the use of the OS-64 cartridge. This in itself turns out to be a big feature. Nearly all BBS' are configured for 80 col., and while it isn't perfect, 64 col is MUCH CLOSER. A monitor is pretty essential, one I bought for $30 worked perfectly. The character set has been designed for read-ability (better than Tasword, I think). Once you get used to 64 Col, it's difficult to go back to 32 col for terminal work. It DRAMATICALLY increases the amount of infor-mation on the screen at any one time. All too often, at 32 Col., by the time you get to the bottom of a menu, the top has scrolled off the screen. This NEVER happens in 64 col. In addition, the ARRANGEMENT of the menu makes more sense, and is easier to follow.

In my original review, I decried the lack of an 80 col printing facility. Besides the potential to add one through the 7K BASIC area (as Tony Gomez has recently done), the standard buffer saves are completely Tasword2 compatible. Although they may be too long, it's easy to break them up with Unloader, then simply load them into Tasword and print from there.

Also, in my original review, I stated that , upon downloading it was impossible to tell if the transfer was successful or not. THAT WAS ALSO INCORRECT. The blinking "R" on the screen tells you it's a successful transfer.

Another mistake I made in my first review was when I said, "If you forget the CAPS LOCK and enter a lower case letter in command mode... you must then reboot the program." Not true at all! (Are you beginning to see how BADLY I mangled the first review?) If you make the above error, it will simply refuse the command until you use a capitol letter. It WILL lock-up and need rebooting if you go offline (using the 2050 modem) and fail to immediately escape to BASIC. However, once you understand this, there's no problem.

Since my original review, I've put this program through a great deal of testing- spending hours and hours online & making file transfers (over 100) of all descriptions. I moved MAC files, AMIGA files, IBM files Text files and Etc.It worked beautifully. There WERE failures, but none I couldn't eventually trace to operator error or Host error. The trick to moving files on foreign computers is this: don't save/load it. Call board A, D/L, disconnect, call board B, and U/L. As I said, I did this MANY times with great success.

One feature I grew to like more and more was the speed of the keyboard. The keyboard scan routine on MTERM is a very slow one. Put mildly, it's a pain. I can, and frequently do, out-type it. But the joy of Specterm is that you can type MUCH faster. This is great on L.D. calls. Specterm also gives you "audio feedback" for each keypress. I really missed it when I went back to other terms. My experience showed that ver 4.0 was a bit TOO fast, but both versions of 4.1 are adjustable so you can select the speed you want. Both new versions also allow for color control of the screen.

One of the BEST things about this program is the certainty of future support. You will be hard pressed to find two people who are more knowledgeable and have done more for T/S Telecommunications than Ed Grey and Dave Clifford. Their support is available both by voice and by modem- the latter in the form of the TIMEXCHANGE BBS. They and fellow users are currently working on utilities to enhance the pro-gram and are available for download free from the TIMEXCHANGE.

So, the big reasons for going to Specterm 64 are these:

1) 1200 BPS Communications, the ONLY way to do this on the 2068
2) Tremendous versatility in the form of a wide-open 7K BASIC component thus enabling direct access to YOUR mass storage device and/or a wide variety of modems.
3) VERY active continued support for the system with new utilities & additions all the time- available on the TIMEXCHANGE BBS.
4) The size of the buffer :31.487K
5) Better display and no need for the OS-64 Cartridge.
6) A Faster keyboard (the newest versions let you adjust the speed)
7) Allows you to use nearly ANY RS-232 modem (the industry standard) when used with a Z-SI/O Card.

I HATE to see a good product maligned by poor reviewing and hope you will under stand my error in rushing v 1.0 to print.

The main differences between ver 4.0 and the 2 v.4.1 (Spectrum & 2068) are these: A)4.0 is Spectrum only B)4.1 allows you to adjust the keyboard speed and screen color (not true of 4.0) C) The new versions have "RELAXED" Xmodem which allows them to work through PC Pursuit. If you own ver4.0 and want to upgrade to the SPECTRUM v.4.1, it will cost you $5 even. If you want the 2068 v.4.1 it will cost $30+ $2 S&H. The Program is available from RMG, SUNSET, Variety Sales, or Grey and Clifford Computer Products/ POBox 2186/Inglewood,CA 90305 (213)759-7406

Making Slides With Your Computer

No, this is not an article about designing playground equipment, nor is it a program to help you improve your slide into second base. Rather, it is an attempt to make you aware are the possiblilities of making PHOTOGRAPHIC slides with your computer. I have been doing this for several years now and want to share my experience with you.

Here is what you need to get started -- a 35mm camera with one or more closeup lenses, a roll of film (Kodak Ektachrome 400 is good),a computer (Sinclair, of course!) preferably with a monitor rather than a TV for better resolution, one or more graphics programs, and a number of text fonts. These last can often be taken from existing programs that use fancy fonts, or they can be created yourself using a UDG designer.

Set yourself up with the camera on a tripod, focussed on the monitor. Call up or create the screen that you wish to photograph, then douse all the lights in the room (by the way, this project is best done at night). The exposure and f-stop are determined by the amount of light emanating from the screen. For example, my most frequent use of my computers in this vein is for the creation of "title" slides, featuring a black back- ground and one or two lines of nicely colored text. I have found that an f-stop of 3.5 and an exposure of one second works well with this type of shot. If, how- ever, you were doing a shot of the opening screen of a game program, you might want to try an f-stop of 5.6 or so and an exposure of 1/250 second. In any case, bracket your exposures; that is, take several shots of the same screen, one at your "best guess" setting, and then one or two above and below the first setting. Consider taking notes of the exposures used on each shot, so that when you get your slides processed you can then determine what the best setting actually was. This will give you some practical knowledge and save some film in the future.

If this article raises enough interest among CATS members who attend the monthly meeting, I would be glad to show some of the slides I have made, as well as "demo" the process. I am currently working up a bunch of public domain fancy fonts for inclusion in a future 2068 CATS software volume. In any event, I hope that some of you dually- afflicted Sinclair Nut/Shutterbugs will try this out.

Its nice to have yet another practical appli- cation to justify our passion for computerdom.

John
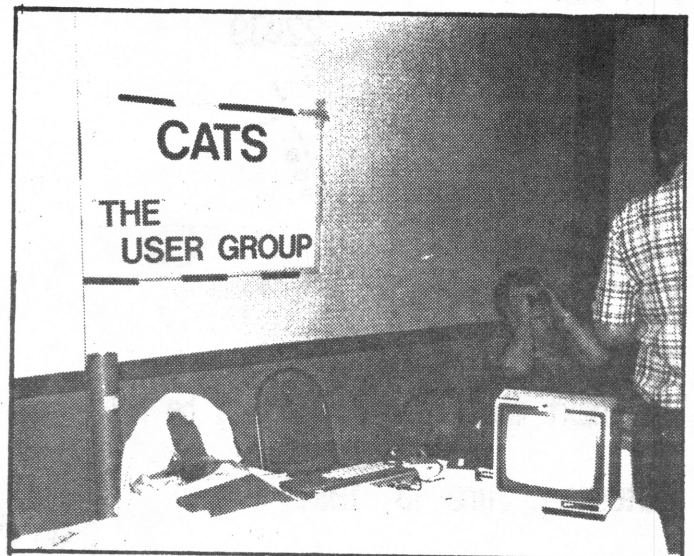
"What next?" moans CATS' RUTH FEGLEY.

Club Information

The Capitol Area Timex/Sinclair User's Group (CATS) is a non-profit special interest organization dedicated to serving the interests on those who own, use or are interested in learning more about the Timex/Sinclair family of personal computers.

The official contact person for CATS is TOM BENT: (301) 730-7187

Monthly meetings are held from 12:00 to 5:00, at the second Saturday of each month in the large meeting room of the New Carrollton Branch Public Library.
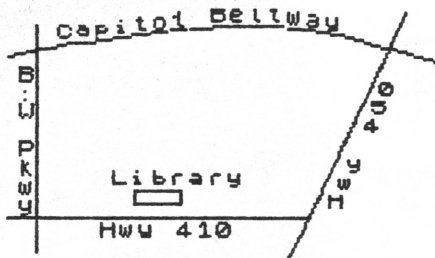
Network Information

Timex SIG on Compuserve: Wednesday night, 10:00 PM Eastern time (Go Club)

OZX BBS: (505) 522-7081 FIDO net 15, node 6

-- . -- East coast: (703) 547-4815 FIDO net 18, node 9

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COME TO OUR MEETING!!
The next meeting of CATS will be held on:

Saturday, June 13, 1987   12:00 PM Hardware Meeting
                                      2:00 PM General Meeting

At New Carrollton Public Library
   7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS, THIS IS THE ONLY ISSUE YOU WILL RECEIVE

DUES: $18 per year, per family